

19990905.ba v02_n659.bam.990905 v02_n660.bam.990905

>From ???@??? Sun Sep 05 15:05:20 1999
Message-Id: <199909051616.d85GG2g04207@sco.theporch.com>
Date: Sun, 5 Sep 1999 11:15:17 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2659

BOATANCHORS Digest 2659

Topics covered in this issue include:

- 1) Re: Rack needed
by "Joseph W. Pinner" <kc5ijd@sprintmail.com>
- 2) Re: Rack needed
by Andre Guibert <aguibert@sympatico.ca>
- 3) Re: Rack needed
by "P. J. *Josh* Rovero" <provero@connix.com>
- 4) Re: Rack needed
by Bill Hawkins <bill@iaxs.net>
- 5) Re: RX Advise
by Jderm740@aol.com
- 6) Rachs and such...
by "Robert Nickels" <ranickel@mwci.net>
- 7) Re: Rack needed
by Andre Guibert <aguibert@sympatico.ca>
- 8) 4 pin mic connector
by thompson@mindspring.com
- 9) FS T4XB,R4B,MS4,PS
by George T Folse III <kb5ww0@bellsouth.net>
- 10) Detecting a shorted turn or two?
by "Herbert M. Rosenthal" <herbrose@lobo.net>
- 11) Re: 4 pin mic connector
by Bob Roehrig <broehrig@admin.aurora.edu>
- 12) Halli speaker ID needed
by Kevin Thomas <kg9il@mc.net>
- 13) BC-348-Q
by Bill Robbins <billrobb@net-link.net>
- 14) Dallas First Sat.
by "Spencer Petri" <wa5jci@flash.net>
- 15) Ceramic formers FS
by BEN NOCK <G4BXD@compuserve.com>
- 16) KW SWR meter FS
by BEN NOCK <G4BXD@compuserve.com>
- 17) RF-301 Transceiver
by Bill Robbins <billrobb@net-link.net>
- 18) Wire Racks for Boatanchors

- by "P. J. *Josh* Rovero" <provero@connix.com>
- 19) Re: Halli speaker ID needed
by "Dan 'Hank' Arney" <kn6di@groupone.net>
 - 20) Re: Detecting a shorted turn or two?
by "Arden Allen" <gumbear@pacbell.net>
 - 21) WTB Manuals
by ail0@lehigh.edu (ARTHUR I. LARKY)
 - 22) Tektronix CRTs and the military
by dma@islandnet.com
 - 23) rx advice and WTB
by Kevin Thomas <kg9il@mc.net>
 - 24) response to Se
by cswiger <cswiger@wilma.widomaker.com>
 - 25) ADMINISTRIVIA: Using The Archives
by listown@jackatak.theporch.com (Mail List Owner)

Message-Id: <199909050031.RAA15213@crow.a001.sprintmail.com>
Subject: Re: Rack needed
Date: Sat, 4 Sep 1999 20:31:07 -0400
From: "Joseph W. Pinner" <kc5ijd@sprintmail.com>
To: Old Tube Radios <boatanchors@theporch.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"

John Dilks, K2TQN wrote the following:

>Joe,
>
> I give you about 6 months, then you'll be looking for more space!
>:-)

Well I hope not. When I get things unpacked, I intend to do some thinning down.

I have things I really want to trade off for some specific longstanding wants.

Also have some extra tubes that I have accumulated over the past year or so that need to be thinned out.

BUT - you are probably more accurate that I!

Joseph W Pinner +
Kingston, TN
KC5IJD / NNNOPHR

Email: kc5ijjd@sprintmail.com

Date: Sat, 4 Sep 1999 20:43:30 -0400 (EDT)
Message-Id: <1.5.4.16.19990904203621.1e6fde84@pop1.sympatico.ca>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Andre Guibert <aguibert@sympatico.ca>
Subject: Re: Rack needed

Bonsoir to All
Know how you feel, I am beginning to feel cramped
in my 172 acres of "Boatanchors" :).
Andre

> I give you about 6 months, then you'll be looking for more space!
>:-)
>
Andre Guibert
aguibert@sympatico.ca

Message-ID: <37D1CECA.DF0FFDEF@connix.com>
Date: Sat, 04 Sep 1999 22:00:42 -0400
From: "P. J. *Josh* Rovero" <provero@connix.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Rack needed
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

"Joseph W. Pinner" wrote:

>
> Well,
>
> I am shortly to move into our new home.
>
> My shack and workshop will be located in the detached two car garage.
> Finally, enough space for my radios!
>
> I am looking for at least one 19" rack - six foot might be OK though
> smaller would probably be better.
>
> I need one with side rail provisions, though, because of some 'heavy
> iron' - like my RT-1512/G, 51J-4, etc. Would also like a rear door.
>

If you can't find a 19" rack fast, check out the CATALOG (not store) special Staples is having on wire racks. 48" wide x 72" tall, 18 inches deep, with a keyboard extension (not BA/radio but handy), 4 shelves. Only \$19.95 without the casters. Will keep many hundreds of pounds of BA gear off the floor and handy for operating...

--

P. J. "Josh" Rovero	email: provero@connix.com
Oceanographer	work: rovero@sonalysts.com
Meteorologist	radio: KK1D
Curmudgeon at Large	web: http://www.connix.com/~provero/

Date: Sat, 4 Sep 1999 21:18:11 -0500 (CDT)
From: Bill Hawkins <bill@iaxs.net>
Message-Id: <199909050218.VAA12083@citrus.iaxs.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Rack needed

Bonsoir, Andre

Lessee, an acre is about 5000 square yards (by US measure). Allowing one acre for your home, that leaves 827,640 square yards for radios. The mind boggles at the sheer acquisitiveness that would fill such an area. Perhaps you are also including antenna farms? :-)

Kind regards,
Bill Hawkins

From: Jderm740@aol.com
Message-ID: <7c11f932.25033018@aol.com>
Date: Sat, 4 Sep 1999 22:31:52 EDT
Subject: Re: RX Advise
To: Old Tube Radios <boatanchors@theporch.com>
CC: boatanchors@theporch.com
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

Kevin

You asked about a good receiver for general coverage, SWL and Ham use and mentioned the Hammerlund HQ-160. If you can find an HQ-180 I think it a better receiver. The 160 is double conversion but the 180 is triple. I've got a couple of them and they seem very sharp and drift resistant. A 180A has the

oscillator on all the time the cord is plugged in.

Jack

Message-ID: <016001bef74b\$91084a00\$512fcfd1@default>

From: "Robert Nickels" <ranickel@mwci.net>

To: Old Tube Radios <boatanchors@theporch.com>

Subject: Rachs and such...

Date: Sat, 4 Sep 1999 22:05:18 -0500

MIME-Version: 1.0

Content-Type: text/plain;
charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

Hi All,

I was considering posting a note about a cost-effective and flexible alternative for BA-support, and the ongoing thread tells me this may be of topical interest...

Anyone who's tried those flimsy metal storage shelves that are stamped out of paper-thin steel and held together with a zillion nuts and bolts would be as sceptical as I was when I read the claim "Supports 1200 pounds per shelf". But when I was in dire need of temporary storage while moving the BA collection into my new house last winter, I tried one, and was pleasantly surprised. I went right back and bought all they had...

First, there are NO nuts, bolts, or other hardware. Each high-density particle-board shelf is supported completely on all four sides by a heavy-gauge stamped steel "beam" or "brace", the ends of which are notched to lock into punched slots in the four corner posts. The only tool required is a hammer or mallet, and it takes about 15 minutes to assemble a 5-shelf rack that measures 6' tall, 3' wide, and 18" deep. You can also assemble the pieces to create two 3' high units, which is what I tried today - Perfect for supporting a heavy BA above other gear, without stacking on top of each other. I painted the shelves in this one with grey epoxy paint for that nice boatanchor appearance!

The best news is the Super Rack sells for \$30 at the local building supply (Menards). I don't know if they are sold by the larger chains like Home Depot or not, but they should be - these things live up to their name - they are SUPER!. If the company ever saw my basement they'd swear I was a stockholder, but I'm just a happy customer! Here is the company info should you wish to contact them about availability:

Product name: "Super Rack" (SR-100, SR-200)

(I've used their "Value Rack" too, but it's only \$3-4 cheaper and has lower

ratings)

HOME-E-QUIP Consumer Products Division
Edsal Mfg. Co.
4400 South Packers Ave.
Chicago, IL 60609

73, Bob W9RAN
(Yes, believe it or not, there really is a Packers Avenue outside of Green Bay!)

I

Date: Sat, 4 Sep 1999 23:08:01 -0400 (EDT)
Message-Id: <1.5.4.16.19990904230236.10cfbbaa@pop1.sympatico.ca>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Andre Guibert <aguibert@sympatico.ca>
Subject: Re: Rack needed

Bonsoir to All
Our Canadian acres are more modests. 204ftX204ft= 5716sqft.
Andre

>Lessee, an acre is about 5000 square yards (by US measure). Allowing one
>

>Kind regards,
>Bill Hawkins

>
>

Andre Guibert
aguibert@sympatico.ca

From: thompson@mindspring.com
Message-ID: <002c01bef74c\$72f226c0\$1b2856d1@default>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: 4 pin mic connector
Date: Sat, 4 Sep 1999 23:12:12 -0400

I now have a rig and an old VOMAX processor that have 4 pin mic connectors. I don't have any experience with 4 pin connectors and the four mics I have don't seem to match. The four pin mics match Ten Tec and early Kenwood (TS520/820) but there seems to be no standard. The circuits show a normal stereo jack and plug connection so I may have to undo the mods. Does anyone have the normal pin out or is there such a thing?

73 Dave K4JRB

Message-ID: <37D1FC7F.2D34@bellsouth.net>
Date: Sun, 05 Sep 1999 00:15:43 -0500
From: George T Folse III <kb5wwwo@bellsouth.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: boatanchors@listserv.tempe.gov
Subject: FS T4XB,R4B,MS4,PS
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

All,

I have for sale the above. The R4B is in ex condition no marks or scratches. The T4XB has 4 holes drilled on the top, looks like someone had mounted a fan on it at one time. The off and on switch does not work, a external switch was mounted on the PS to take the place of the one on the xmitter. Other than that no other marks on scratches. The speaker and PS also in ex condition. Unit work fine, 100 watts plus output. The mic does not go with the package. All manuals. \$500 + shipping.

Thanks,
George

Message-ID: <37D20949.31C3@lobo.net>
Date: Sun, 05 Sep 1999 00:10:31 -0600
From: "Herbert M. Rosenthal" <herbrose@lobo.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Detecting a shorted turn or two?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I recently replaced an "18V 3A" transformer in a small power supply because it was running extremely hot, yet the power supply worked. I did measure approximately 18 v rms no load (open secondary) and 16 volts with a 3 amp load.

With no load at all (secondary disconnected from the power supply), the transformer still runs very hot to the touch. I suspect a shorted turn or turns in the primary or secondary.

I measured the primary current by measuring the drop across a 2 ohm resistor in series with the primary; this calculated to about 0.1A, and so the unloaded primary wattage is about 12 watts.

Now it's possible that this is normal power which generates eddy current in the laminations, which would cause the heating. Seems high to me for a 50 watt transformer.

Next, I loaded the secondary with a 2 amp load, and calculated the secondary load to be about 32 watts (16 volts). Measuring the primary current, and calculating primary power, I obtained about 60 watts (0.5A).

So for 60 watts in, I get 32 watts out (not very efficient), plus a bunch of heat... but transformers are usually 80-95% efficient.

Again I focus on a shorted turn or turns, but I'm certainly open to suggestion, before I chuck the transformer.

Is there some way to detect shorted turns by measurement? I do not have the factory specified winding resistances.

Herb Rosenthal W5AN
herbrose@lobo.net

Date: Sun, 5 Sep 1999 07:09:47 -0500 (CDT)
From: Bob Roehrig <broehrig@admin.aurora.edu>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: 4 pin mic connector
Message-ID: <Pine.OSF.3.96.990905070724.11893B-100000@admin.aurora.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Sat, 4 Sep 1999 thompson@mindspring.com wrote:

> The four pin mics match Ten Tec and early Kenwood
> (TS520/820) but there seems to be no standard.
> Does anyone have the normal pin out or is there such a thing?

I have seen these 4 pin connectors wired every way you can imagine. Yaesu, Kenwood, Icom, CB rigs, etc all seem to do it differently. Since I have more Kenwood stuff than anything else, I consider that the "standard".

"Nostalgia is a thing of the past"
E-mail: broehrig@admin.aurora.edu or k9eui@arrl.net 73 de Bob, K9EUI
CIS: Data / Telecom Aurora University, Aurora, IL
630-844-4898 Fax 630-844-4222

Message-ID: <37D26C6C.7CE67382@mc.net>
Date: Sun, 05 Sep 1999 08:13:16 -0500
From: Kevin Thomas <kg9il@mc.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Halli speaker ID needed
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

I got a speaker with a SX-101 that I recently purchased from a local ham. It is a Halli speaker. It is about 6 inches square, has a dark gray faceplate/border with a silver perforated grill in a lighter gray cabinet. The border has the Halli circle h emblem above the word hallicrafter across the bottom. There are no id numbers or anything else on the exterior.... any ideas??? I can provide a jpg if needed.

thanks!
Kevin
KG9IL

Message-Id: <3.0.6.32.19990905092129.008462f0@serv01.net-link.net>
Date: Sun, 05 Sep 1999 09:21:29 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Bill Robbins <billrobb@net-link.net>
Subject: BC-348-Q
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

In addition to the RF-301 I picked up, I also got a BC-348-Q.

Someone has just begun to add a power supply but never completed the job. Can anyone help with information on the rig...schematic, manual, mods?

I may also need a knob or two. Any help is appreciated.

Bill

Message-ID: <000101bef7a2\$0e19ff60\$14301ed1@wa5jci>
From: "Spencer Petri" <wa5jci@flash.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Dallas First Sat.
Date: Sun, 5 Sep 1999 08:24:58 -0500

MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Greetings,

Yesterday I went against the flood and drove into Dallas. For awhile I thought it would be empty when I arrived there but sure enough there were plenty of vendors and a large crowd.

Still lots of BA test equipment. Saw several early Halli rxs and one National device with a 0-100 sliderule dial and two round plug-in coils on the front panel for the rf amp and the osc. Didn't see any ID anywhere. Whatzit? Several other older radios.

Thought I'd try and see about seriesing 5VDC PSs to make a 12 VDC supply. Came away with three 100 Amp enclosed mainframe switching supplies for \$10. We'll see.

Also found a box of 1 watt carbon resistors, about 20 lbs, for \$5 that followed me home.

That's about it. Nice day, as it didn't get too hot to carry stuff out until about 10:30.

es 73 de Pete WA5JCI EM21

6 meter VUCC # 361
2 meter VUCC # 346

Date: Sun, 5 Sep 1999 09:41:53 -0400
From: BEN NOCK <G4BXD@compuserve.com>
Subject: Ceramic formers FS
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199909050942_MC2-83A2-C4E6@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

I have a number of formers: Ceramic, most ribbed, =

2" by 4.5" long 4.00 Pound each

and

2.5" by 4.5" long 5.00 Pound each

ideal high power atu or pa use.

Ben G4BXD.

Date: Sun, 5 Sep 1999 09:41:54 -0400
From: BEN NOCK <G4BXD@compuserve.com>
Subject: KW SWR meter FS
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199909050942_MC2-83A2-C4E8@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
charset=ISO-8859-1
Content-Disposition: inline

I have a nice KW SWR Meter, as used with the British KW-2000 series transceiver.

Anyone with a 2000 or derivate, needs the SWR meter, the Dummy Load and the ATU to complete his/her collection. This is part of it. =

\$40 plus postage.

Ben G4BXD.

Message-Id: <3.0.6.32.19990905091925.0084a6e0@serv01.net-link.net>
Date: Sun, 05 Sep 1999 09:19:25 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Bill Robbins <billrobb@net-link.net>
Subject: RF-301 Transceiver
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

I just picked up a RF Communications RF-301 HF Transceiver.

Its in really nice condition and I need some information on it.
A manual would be a real plus.

Can anyone help? Receives real good and transmit untested until

I find out more.

Thanks in advance

Bill

Message-ID: <37D276F8.2CCB8514@connix.com>
Date: Sun, 05 Sep 1999 09:58:16 -0400
From: "P. J. *Josh* Rovero" <provero@connix.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Wire Racks for Boatanchors
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

For those who asked, the Staples web site still lists this product at \$258.95. Catalog price \$19.96. They do have description on their web site, www.staples.com.

Safco Wire Lan System. 72"H x 48"W x 30"D, 4 shelves plus keyboard extension. (Actually 18"D shelves, one gets to be 30" if you attach the keyboard extension)

Stock # 382950-J2, Catalog Code W79S9999N, prices guaranteed through September 20, 1999.

The shelf is \$20, the rubber casters and other accessory shelves are all more than that!

--

P. J. "Josh" Rovero	email: provero@connix.com
Oceanographer	work: rovero@sonalysts.com
Meteorologist	radio: KK1D
Curmudgeon at Large	web: http://www.connix.com/~provero/

Message-ID: <37D27E99.A3EA60B6@groupone.net>
Date: Sun, 05 Sep 1999 07:30:50 -0700
From: "Dan 'Hank' Arney" <kn6di@groupone.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Halli speaker ID needed
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Kevin, I have 2 of them, one is like new and they both came with my HT-44/SX-117 rig. No markings any where.

Hank

Message-Id: <199909051448.HAA22673@mail-gw6.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Detecting a shorted turn or two?
Date: Sun, 5 Sep 1999 07:45:34 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Herb;

> Is there some way to detect shorted turns by measurement? I do not have
> the factory specified winding resistances.

A common problem with cheap transformers is not enough iron. With no load the core begins to saturate on voltage peaks. This causes an increase in primary current and the resultant $I^2 R$ heating of the wire. To check for saturation current, reduce primary voltage until current drops to a much smaller value out of proportion to the voltage decrease. For example, a 100VA transformer has an unloaded primary current of 15mA at 120V and the current drops to 5mA at 100V and 1mA at 80V. If a transformer has shorted turns the primary current would decrease proportionally to the voltage decrease.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-Id: <199909051529.LAA35934@ns5-1.CC.Lehigh.EDU>
Date: Sun, 05 Sep 1999 11:29:28 EDT
From: ail0@lehigh.edu (ARTHUR I. LARKY)
Subject: WTB Manuals
To: Old Tube Radios <boatanchors@theporch.com>

I'm looking for the following manuals:

Ballentine model 320 True Root Mean Square Voltmeter
if not a full manual, then schematic and parts list

hp 8405A Vector Voltmeter
because of its complexity, probably need a full manual
(not a BA, but used to service BA's)

Money will be paid appropriately.

Thanks,
Art K3HBA

Message-Id: <m11NeMK-0006dAC@mail.islandnet.com>
Date: Sun, 05 Sep 1999 08:26:23 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: dma@islandnet.com
Subject: Tektronix CRTs and the military
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi All ...

I recently picked up some surplus stuff from one of our country's air bases and noticed a small pile of what looked like new Tek CRT boxes - 5" kind but no idea what numbers. I told the enlisted man that was helping fetch my stuff that what had been inside those boxes would be of interest. He said the tubes (which were new) were stored in a lock-up with other hazardous materials for disposal at an appropriate toxic waste site. Apparently the rules are that anything that has radioactivity or PCBs has to be disposed of properly, and if they aren't certain (based on their minimal records) they assume the worst. Thus bye-bye CRTs. I know that recently mil receivers and other gear has been coming on the market here with transformers and can electrolytics ripped out. Sure does wreck a nice radio.

Jan Skirrow, VE7DJX

... in sunny Maple Bay, BC, Canada

"So many radios, so little time"

<http://www.islandnet.com/~dma/Boatanchors/>

Information, Parts, Pictures, Articles: The R-390A
and other classic gear.

Message-ID: <37D291FF.2F89F57@mc.net>
Date: Sun, 05 Sep 1999 10:53:36 -0500
From: Kevin Thomas <kg9il@mc.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: rx advice and WTB
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Thanks to all who responded to my original post. The overwhelming winner was the HQ-180 as a mate for my Apache.....so.....

anyone have a HQ-180 and/or S-200 they would like to part with....?????

also looking for :

SB-10
SB-101 manual
TX-1 Manual
dow key relay

have minimal trade bait....SX-101 project, QF-1, R-47 spkr(i think)...HW-101 parts rig.....

thanks again and a happy holiday weekend to all
Kevin
KG9IL

Date: Sun, 5 Sep 1999 11:53:50 -0400 (EDT)
From: cswiger <cswiger@wilma.widomaker.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: response to Se
Message-ID: <Pine.BSF.3.96.990905115130.792A-1000000@wilma.widomaker.com>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Barry et al :

In the interest of a balanced view, I just had to do a little lazy web research into what has recently been made in this august forum to sound like the most deadly substance since the discovery of plutonium: selenium.

What I've found is basically "a natural element, is essential to people and animals in small quantities, but harmful at larger doses." There are several sites peddling dietary supplements, with selenium.org touting possible uses in treating patients w/ Alzheimer's, Psoriasis, HIV, and preventing certain types of cancer.

Also, Se rectifiers are still being sold, as here:
http://www.cke.com/html/selenium_products.html
and here: <http://www.dbprod.com/component.html> and some companies (email rumor has it) will even make duplicates of your old rectifiers. Personally, as mentioned, I'd as soon replace 'em with

a 1N400X and series resistor and be done with it (not too concerned with authenticity under the chassis!). Lastly, one fellow discusses a radio with "smell of overheating selenium rectifier" getting said surgery, with no mention of funeral services.

http://www.dundee.ac.uk/sections/cs/staff/al_radio/ultra2.htm

In short, I keep my old tube chemistry set in a completely separate, isolated, room from the kitchen w/ plenty of ventilation when necessary, scrub cadmium oxide off outside, keep a can of trichlor, operate amps with 1.5Kv plates and am keeping my selenium plates, Im just not going to suck on them, scrape off the coating, inhale fumes or anything!

Chuck - "spared the wrath of Dennis"

kb4new

cswiger@widomaker.com

Message-Id: <199909051615.d85GF1W14224@jackatak.theporch.com>

From: listtown@jackatak.theporch.com (Mail List Owner)

To: Old Tube Radios <boatanchors@theporch.com>

Subject: ADMINISTRIVIA: Using The Archives

Date: Sun, 5 Sep 99 11:15:01 CDT

Gang-

!!!THIS INFORMATION HAS CHANGED!!!!

!!!SAVE THIS FILE FOR FUTURE REFERENCE!!!!

This periodic post is designed to help everyone gain more value from their boatanchors subscription.

Often I receive an email request, or I read on the list, of someone who is aware there is an archive available with some special files with special information that is of a more permanent nature than a post to the list, but who is unaware of how to retrieve these gems.

In the archives, there are cross-reference tables for Tubes, Military Equipment Nomenclature, suggestions for restorations and modifications to our beloved fire bottle rigs, and some wonderful stories of real adventures and the people involved.

These files may be accessed by the Web... quickly and easily.
These files can also be accessed by email.

For WWW access:

go to <http://www.theporch.com>

select "ListProc Web Interface"
on your first time there, click "Register For Full Account"
follow the instructions, and BE SURE you use the email address
that you have your BoatAnchors mail addressed to -- this interface
will work ONLY for members of the list!

Once registered, you can:

- search the archives of previous posts (so far we haven't loaded
all the previous posts online, but that is in the works;
- download the index of files;
- retrieve individual files
- manage your subscription via the web interface

AWESOME!

For email access:

Step One:

- send an email (leave the subject blank, or, if your mailer
requires a subject, type a single character, like "a" in
the subject box) to:

listproc@sco.theporch.com

Step Two:

- in the body type:

index boatanchors

NOTE: The index **includes** all the previous articles now available
through the web interface, so the index is HUGE and difficult
to search -- the web interface is much easier.

Step Three:

- after checking out the index for files of interest, and finding
the one or more you want to have sent to you, send another
email to:

listproc@sco.theporch.com

- and, in the body, type:

get boatanchors file.name

- where you substitute the name of the file from the index
for "file.name"

This should get you off to a good start. If you encounter any problems,
please let me know at the address below.

--

73

Jack, W4KH/Mobile - - - Mailing List Archiver/Owner - - -

listtown@jackatak.theporch.com - "Plus ca change, plus c'est la meme chose"

"Il n'y a que les idiots qui ne changent jamais d'idee"

Sun Sep 5 11:15:01 CDT 1999

End of BOATANCHORS Digest 2659

>From ???@??? Mon Sep 06 05:05:19 1999
Message-Id: <199909060125.d861PWg11720@sco.theporch.com>
Date: Sun, 5 Sep 1999 20:25:13 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2660

BOATANCHORS Digest 2660

Topics covered in this issue include:

- 1) Tektronix relays
by Avery Comarow <acomarow@USNEWS.COM>
- 2) Re: Detecting a shorted turn or two?
by Bill Hawkins <bill@iaxs.net>
- 3) Some Thoughts on Test Equipment
by "Richard W. Solomon" <wlkszt@tiac.net>
- 4) RE: Dallas First Sat.
by "David Newkirk" <dpnewkirk@home.com>
- 5) Re: Detecting a shorted turn or two?
by "Arden Allen" <gumbear@pacbell.net>
- 6) Re: Tektronix CRTs and the military
by "Arden Allen" <gumbear@pacbell.net>
- 7) Re: Detecting a shorted turn or two?
by Scott Robinson <spr@earthlink.net>
- 8) Hallicrafters oddity?
by "Bob Duckworth" <wb4mnf@atl.org>
- 9) collins 312b-5
by Brian Michael <brianmd1@home.com>
- 10) Re: Some Thoughts on Test Equipment
by "Roberta J. Barmore" <rbarmore@indy.net>
- 11) Re halli oddity
by philip mccooy <dgnova@erols.com>
- 12) National LF Regen data?????
by "Tom R. Rice" <tomrice@netcom.com>
- 13) What Finals in FLDX-500?
by Heinz und Hannelore Breuer <hbreuer@debitel.net>
- 14) Navy Hammarlund RBG info please
by Paul Thekan <Paul.Thekan@eimac.cpii.com>
- 15) Re: Detecting a shorted turn or two?
by Morris Odell <morriso@vifp.monash.edu.au>

- 16) FS: Globe Scout Deluxe & RME
by Greg Carter <kx4r@atl.mindspring.com>
- 17) Re: Rack needed
by GeorgeHumphrey <gah@koyote.com>
- 18) random goings-on
by "Benjamin D. Hall" <kd5byb@WT.NET>
- 19) Collecting Radios, Shelby fun, partial roster
by Al Parker <anchor@coastalnet.com>
- 20) RE: Some Thoughts on Test Equipment
by "Ed Tanton" <n4xy@att.net>
- 21) Re: Rack needed
by Kim Herron <kherron@voyager.net>
- 22) Re: Navy Hammarlund RBG info please
by Kim Herron <kherron@voyager.net>

Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Avery Comarow <acomarow@USNEWS.COM>
Subject: Tektronix relays
Date: Sun, 5 Sep 1999 12:42:09 -0400
Message-Id: <16420910900929@usnews.com>

I've unearthed 12 small Tek relays and have no idea what they are for. Very small, look like they have solder tabs for PC insertion, 15VDC/600 ohms. Eight are PN 148-0034-00 and four are 148-0035-00, the difference being the number of poles.

Anyone with a use for them can have 'em for, say, \$2 plus a minimal amount for shipping.

73, Avery W40GK

Date: Sun, 5 Sep 1999 11:53:21 -0500 (CDT)
From: Bill Hawkins <bill@iaxs.net>
Message-Id: <199909051653.LAA14597@citrus.iaxs.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Detecting a shorted turn or two?

There's another thing that'll make it run hot - magnetic saturation. This is very non-linear with voltage applied. Use your 2 ohm resistor and a variable transformer to see if the primary volt-amps (it's not Watts with magnetic stuff in the circuit) drop off much faster than the voltage. Cheap transformers run near saturation, so you'll see some non-linearity with voltage.

If it's an open frame transformer, it can be damaged by being dropped in such a way that the iron laminations separate to form a tiny gap. This quickly reduces the amount of iron in the magnetic circuit, and causing saturation at lower than rated voltage. You might be able to fix it by 'adjusting' it with a hammer to get the frame square.

If the curve of voltage across the 2 ohm resistor is pretty linear with voltage (and it runs hot, which it does) then you have a shorted turn or even a shorted layer of fine primary wire, from one layer to the next at the edge of the interlayer insulation.

If you can measure inductance, see how the primary of the hot transformer compares to a similar one. Low inductance means shorted winding because the test voltage is way below the saturation range.

I'd be interested to hear what you found out.

Bill

Message-ID: <01BEF7A0.1C333AA0.w1kszt@tiac.net>
From: "Richard W. Solomon" <w1kszt@tiac.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Some Thoughts on Test Equipment
Date: Sun, 5 Sep 1999 13:10:55 -0400
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

There has been some discussion on the merits of acquiring high end (Tek, HP, etc) test equipment vs the "other stuff". With the prices of Tek & HP gear almost in free

fall, it makes no sense to go any other way.

For example, a 100 MHz Tek scope (7603) with a couple of plug-ins can be had for less than \$200 these days. And the versatility that plug-in capability gives you can't

be beat. You can get DMM plug-ins, Freq Counter plug-ins, even a Transistor (yecchh !!)

Curve Tracer plug-in. If you need something bigger, the 7700 series mainframes go even higher in frequency for not too much more.

The idea of looking at a 10 - 20 MHz signal with a 100 - 200 MHz scope makes for easier sig tracing.

A like story is appearing in Signal Generators. The old workhorse, the URM-25, now appears more frequently in the later versions, the -F and -G. Prices on these have dropped into the \$75 to 150 range. The newer HP generators that go to 512 MHz and their MIL counterparts have been also showing up with greater frequency, and what was

once priced (and for some, still is) in the \$750 - 900 range, can now be found for

\$300 -

400. The price will come down further still as more and more appear on the market. So, if you are in the market to acquire a fine piece of test equipment or to upgrade the

test bench, keep an eye out for these, you cannot beat them.

Just one mans opinion.

73, Dick, W1KSZ

From: "David Newkirk" <dpnewkirk@home.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Dallas First Sat.
Date: Sun, 5 Sep 1999 13:34:44 -0400
Message-ID: <000001bef7c4\$f130a3e0\$1e360818@cc456763-a.vron1.nj.home.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Pete wrote:

> Still lots of BA test equipment. Saw several early Halli rxs and one
> National device with a 0-100 sliderule dial and two round plug-in coils on
> the front panel for the rf amp and the osc. Didn't see any ID anywhere.
> Whatzit?

An FB-7-series receiver, circa 1933-1936 or so.

73,

Dave, W9VES
dpnewkirk@home.com

Message-Id: <199909051850.LAA03018@mail-gw3.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Detecting a shorted turn or two?
Date: Sun, 5 Sep 1999 11:40:43 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Bill;

Gotta pick a nit:

> If it's an open frame transformer, it can be damaged by being dropped

> in such a way that the iron laminations separate to form a tiny gap.
> This quickly reduces the amount of iron in the magnetic circuit, and
> causing saturation at lower than rated voltage.

Actually, opening up the gap(s) increases the saturation current level. But what also happens is the inductance decreases. If the inductance is already shy (too little inductive reactance at 60 Hz), you can expect primary current to increase and therefore more copper heating (but less saturation). I wouldn't worry about dropping a power transformer however, with the overlapping E and I laminations in power transformers there is essentially no gap to open.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-Id: <199909051850.LAA03021@mail-gw3.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Tektronix CRTs and the military
Date: Sun, 5 Sep 1999 11:47:28 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Jan;

>Thus bye-bye CRTs.

Do-gooderism run amuck. Take a simple principle and apply it to everything that comes into sight. As we used to say in the Navy, "the sandcrabs (civilian government employees) gotta do SOMETHING to earn their sweet government pensions". Remember, government is for the protection of us from ourselves.....at our expense!

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-Id: <v03007803b3f86f94e149@[209.179.193.74]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Date: Sun, 5 Sep 1999 12:07:28 -0700
To: Old Tube Radios <boatanchors@theporch.com>
From: Scott Robinson <spr@earthlink.net>
Subject: Re: Detecting a shorted turn or two?

Herb and the gang,

The way I do this is with an LCR bridge, and e Heathkit will do this just fine. Compre the Q of the transformer primary to that of a similar sized power transformer in good shape. A shorted turn will make the Q very low.

Regards,

Scott Robinson
spr@earthlink.net

Junque is GOOD for you!

Message-Id: <199909051959.PAA09931@hat-trick.atl.org>
From: "Bob Duckworth" <wb4mnf@atl.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Hallicrafters oddity?
Date: Sun, 5 Sep 1999 15:52:35 +0100

Enjoyed seeing everyone at Shelby.
Drank too much beer, ate too much at the fish camp,
didn't visit enough and only swapped for one
radio but it really grabbed my attention.

I could find no photo/info for this in doing web search.
Hallicrafters SX series with 30's style exposed dial that
says sky challenger

Only, it looks nothing like a sky challenger.

It has two window dials, one either side of the
big exposed shiney dial.
One window dial is connected to the
"REJECTOR"
while the other is connected to the bandspread.

has crystal filter, bfo, pitch and phasing controls
5 bands 550kc - 38mc.

no cabinet came with it and it's rather forlorn looking but I liked
the "REJECTOR" which appears to be a preselector
so much that a swap was inevitable.

But, what the heck is it?

Construction appears to be late 30's based on
tube lineup and IF can style

I've seen a few references to an SX-18 but
can find no photos for comparison.

-bob
wb4mnf

Message-ID: <37D2C95E.5783A9D7@home.com>
Date: Sun, 05 Sep 1999 15:49:50 -0400
From: Brian Michael <brianmd1@home.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: collins 312b-5
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hello all:

Recently acquired a nice round emblem 312b-5 at the right price. Only
problem is a previous owner amputated the connecting cable and 9 pin
connector that mates with the kwm-2. Anyone know a good source for the
connector or correctly color coded cable??

Thanks

Brian Michael
W10U

Date: Sun, 5 Sep 1999 15:56:18 -0500 (EST)
From: "Roberta J. Barmore" <rbarmore@indy.net>
To: Old Tube Radios <boatanchors@theporch.com>
cc: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Some Thoughts on Test Equipment
Message-ID: <Pine.SUN.4.10.9909051551320.7405-1000000@indy1>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hey, darn it!

I'm still using a 7603 'scope mainframe *professionally!* Mostly with
the spectrum analyzer plug-in; it catches things the digital ones cannot.

For anyone who's wondering, they *are* very nice widgets. When the one
at work isn't being a spectrum analyzer, it's an up to four channel
'scope, which is about three more than you usually need.

...And one of the reasons we still have it (aside from it being one of two matching pieces in a TV sideband analyzer setup) is that this hardware is just almost *disposable* these days, with all the major components commonly available at low prices.

73,
--Bobbi

KB9GKX "RJ" rbarmore@indy.net Roberta J. (Bobbi) Barmore
FISTS #3388 * G-QRP #10001 * ARRL * RSGB * WIA
Appreciator Of Vacuum-Tube Ham Gear and Vintage Keys

Message-ID: <37D30C59.2778@erols.com>
Date: Sun, 05 Sep 1999 17:35:37 -0700
From: philip mccoey <dgnova@erols.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re halli oddity
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bob you have got a SX-18

This is a sky-challenger, the SX-15 with the image rejecter circuit added.

There is an article in one of the 1930s QST about this circuit.

Philip McCoy dgnova@erols.com

From: "Tom R. Rice" <tomrice@netcom.com>
Message-Id: <199909052155.0AA19486@netcom15.netcom.com>
Subject: National LF Regen data?????
To: Old Tube Radios <boatanchors@theporch.com>
Date: Sun, 5 Sep 1999 14:55:37 -0700 (PDT)
Cc: glowbugs@piobaire.mines.uidaho.edu (free glowbugs)
MIME-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: 7bit

A delightful find at today's Livermore swap meet:

Definitely a National vernier dial ass'y with a pointer
which moves over 4 bands, covering the range 15 to 600 kc.

Unlike the usual National dial as used in the RBL and similar radios, there's no round logging disk which turns with the knob, and the dial frame is a bit smaller than the RBL's dial.

Moore is no help, as he doesn't show regens, so I'm just curious as to what this might be off of (curious grammer, too ;-)

It won't kill me not to know, as I'm gonna draw a new paper scale and use it on a vfo, but it would be nice if someone could suggest its heritage.

tnx & 73 de WB6BYH

--

"Start off every day with a smile and get it over with." --W.C.Fields

Tom R. Rice

tomrice@netcom.com

Message-ID: <37D2634A.4DDA@debitel.net>

Date: Sun, 05 Sep 1999 14:34:19 +0200

From: Heinz und Hannelore Breuer <hbreuer@debitel.net>

MIME-Version: 1.0

To: Old Tube Radios <boatanchors@theporch.com>

Subject: What Finals in FLDX-500?

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Hi,

I picked up an early 70s vintage Sommerkamp (YAESU) FLDX-500 transmitter at a local swapmeet. Unfortunately there are no finals and the manual is missing too. The seller couldn't tell me anything about it either. :-(

Anybody know what finals were used in this rig? There are two 12-pin sockets. I am sure that it used sweep tubes probably 6KD6s which are used in some of the FTDX transceivers.

73

Heinz - KM5VT

Message-Id: <199909052134.0AA05917@scottie.eimac.cpii.com>

Date: Sun, 05 Sep 1999 15:23:36 -0700

To: Old Tube Radios <boatanchors@theporch.com>

From: Paul Thekan <Paul.Thekan@eimac.cpii.com>

Subject: Navy Hammarlund RBG info please

Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Hello to the group

I bought today at the Livermore swap a Hammarlund HQ 120 that has been dressed up for the Navy and called a RBG receiving set. The band spread is not set up for the hambands but for some other frequency range. There is also speaker called out to accompany this reciever which I would like to try and locate.

Anyone know the purpose of this reciever as used by the Navy and would a copy of the manual be available. Thanks for the help.

Paul N6FEG

Message-ID: <37D2F1CB.BFBDAB7A@vifp.monash.edu.au>
Date: Mon, 06 Sep 1999 08:42:19 +1000
From: Morris Odell <morriso@vifp.monash.edu.au>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Detecting a shorted turn or two?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi all,

Herbert M. Rosenthal wrote:

<snip>

> Is there some way to detect shorted turns by measurement?

One thing you can try if you have the right gear is to look at the current waveform as the transformer is magnetized. This will show you whether there is saturation. Energize the transformer by applying rated voltage to a low voltage secondary winding. DON'T DO THIS TEST WITH MAINS VOLTAGE TO THE PRIMARY. Using a 'scope with a current probe or using a low value shunt resistor in series, look at the current waveform. If it looks roughly like a sine wave, all is well and you just have a cheap transformer with excessive eddy current or hysteresis loss. If it looks like a peaked sine wave (ie: a sine wave with a spike at the crest) you have saturation which may mean too little iron or maybe a shorted turn.

ANother method involves connecting a 'scope across one winding (the primary is OK for this one) and shock exciting it with a pulsed waveform such as the sawtooth or gate output of an old Tek 'scope (with an

appropriate resistor in series - these are high impedance outputs). Use a slowish sweep speed of around 100 ms/div. An intact winding will show a damped oscillation. The presence of a short will show little or no oscillation.

Try these methods with an intact transformer first to see the effect.

Good luck,

Morris VK3DOC

Message-Id: <3.0.5.16.19990905183433.3fcf64be@pop.atl.mindspring.com>
Date: Sun, 05 Sep 1999 18:34:33 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Greg Carter <kx4r@atl.mindspring.com>
Subject: FS: Globe Scout Deluxe & RME
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Howdy BA Afficianados:

Still thinning the shack here and have the following for sale:

Globe Scout Deluxe CW/AM transmitter circa 1960.
single 6146 final, 7027A modulator (Heising or choke modulation.)
About 60 watts out on CW and 45 out on phone.
Works and actually sounds pretty good.....have made several
AM qso's on 3885 .
New electrolytics and re-painted case (very close to original hammertone
blue) and copy of manual.
Price \$125 plus shipping from Taylorsville, GA 30178 (abt 40lbs)

RME HF 10-20 Converter
Converts 10,15,and 20 mtrs to 7.000Mc essentially making an older
receiver dual conversion and decreasing images normally found
on the high bands.
Originally designed to cosmetically match the RME-45 and 84 rcvrs.
Cosmetically very good, black wrinkle cabinet, front panel and dial
in great shape. Electrically complete but unchecked.
Price \$40 plus shipping from 30178 (15lbs)

Tnx and 73 for now !
Greg KX4R
kx4r@mindspring.com

Message-Id: <3.0.6.32.19990905182127.01767900@mail.koyote.com>

Date: Sun, 05 Sep 1999 18:21:27 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: GeorgeHumphrey <gah@koyote.com>
Subject: Re: Rack needed
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

SNIP

>
> Bonsoir to All
> Our Canadian acres are more modest. 204ftX204ft= 5716sqft.
> Andre
>>Lessee, an acre is about 5000 square yards (by US measure). Allowing one
>>
>>Kind regards,
>>Bill Hawkins
>>
>>
>Andre Guibert
>aguibert@sympatico.ca
>

Andre, I bet Bill is from Texas. ;-)
73 George (E. Texas)
KC5WBV

Message-Id: <3.0.32.19990905193853.007d6100@mail.wt.net>
Date: Sun, 05 Sep 1999 19:38:56 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: "Benjamin D. Hall" <kd5byb@WT.NET>
Subject: random goings-on
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Greetings all...

Hope everyone is have a fine weekend. Things here are a little slower than usual, spreading out a normal weekend's activities into three days, that sort of thing...

Well, between packing up all of Halli SX-24 parts that folks needed (which should hit the post office by Wednesday), I've been doing a lot of thinking about the RME-45A/B I've got on the bench. At the suggestion of hank van Cleef, I've been spending a lot of time looking at the power supply, and re-familiarizing myself with the difference between capacitor input filters, choke input filters, and diode ratings.

In my opinion, I've found several flaws in the engineering of the RME-45, which rather than pointing to shoddy engineering at RME, are more what I'll call "design holdovers" from the days of field coil speakers. To make for a longer lasting receiver, I'm thinking about some modifications.
(purists: consider hitting delete now)

Flaw #1: The 45 uses a voltage divider, consisting of a 4,500 ohm, a 5,500 ohm, and a potentiometer in series, with B+ applied to the top. The first tap is used to feed a couple of screens, the second as a voltage reference for the S-meter bridge circuit.

Running the numbers, that divider uses almost 10 watts of B+. Looking at the schematic and consulting the GE manual, moving the couple of screens from the bleeder to the regulated (by a VR-150) 150 volt line involves a couple of resistor changes. That's easy.

Second, looking at an RME-45B schematic I've got laying around, I noticed that RME changed the voltage reference in the S-meter of the B from the bleeder string to the VR-150 line. That's easy too - in fact, I did it with the stock harness.

So, the voltage divider is now gone - 10 watts saved.

Flaw #2: Unfortunately, the 80 rectifier was being pushed to 140 ma current draw, which exceeds the 80's 125 ma recommended limit. I saved some B+ drain by getting rid of the voltage divider, but 15 ma worth? I don't know. So, it looks like this is a good time to look to silicon - 80's are too darn expensive to be using them beyond their ratings. So, I'm thinking of using four 1 kv, 3 amp diodes in place of the 80. (two diodes in series, to insure I don't exceed the PIV ratings - overkill probably, but the diodes are like 20 cents each)

As has been the subject on the list before, replacing the 80 with silicon gives us about 60 more volts than the 80 did at full load. Plus, due to the fact that the 80 is run beyond its 125 ma limit, it maybe 60 more volts than planned. Adding resistors is the usual plan here - but 60 volts at 140 ma is almost 10 watts. I wanted to also cut down on heat, so this isn't the way I wanted to go!

Hank van Cleef suggested changing to a choke input filter, which reduces the voltage output. Plus, the texts I consulted show better voltage regulation, better transformer utilization, and a lower voltage output than the capacitor input filter. Sounds good - I knock back the voltage from the silicon rectifiers without adding resistors, plus get better regulation, and I can use a larger filter capacitor without worrying about the ripple current in the rectifiers and/or transformer.

As another bonus, the silicon units pull no filament current, again saving

heat and power...

While all indications point to the choke-input filter working well, if it doesn't I'm planning to add another choke and another capacitor, for the "mother of all filters."

Looking forward to hearing some comments from y'all...

Thanks and 73,
Ben

Benjamin D. Hall, KD5BYB, Engine and radio collector / operator.
Located in Houston, Texas, USA.
e-mail: kd5byb@WT.net, web: <http://web.wt.net/~kd5byb/>
"An ye harm none, do what thou wilt."

Message-Id: <3.0.5.32.19990905203948.008b9450@mail2.coastalnet.com>
Date: Sun, 05 Sep 1999 20:39:48 -0400
To: Old Tube Radios <boatanchors@theporch.com>
From: Al Parker <anchor@coastalnet.com>
Subject: Collecting Radios, Shelby fun, partial roster
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Bob Duckworth, wb4mnf, starts the thought:

"So if you see me caressing a worn old carcass with holes drilled in the sides and non factory parts nestled inside, and wonder why...."

Fortunately, many of us have diverse interests in BA's. I observed this at Shelby the past few days, & saw Bob's post when I got home, as I was there from Thurs. PM to Sat. early PM. If we didn't look for different things, we'd be all over each other even more than we are, scratching for the "good stuff".

I enjoyed Shelby immensely, once again. Met some old friends (some of them not too old in all ways), some list members who I have read but not previously met, and made more new friends (I hope).

I know I'll miss some, but here's a partial list of who I saw. You guys will forgive me for asking & writing names down, but if I don't, I'll call you something else next yr, or even tomorrow ;-) some I didn't write down, & can't remember parts:

This first group was settled in together, thanks to Haney, who reserved some space last Sun:

Haney Howell, K2XN - Nick England, KD4CPL - John Poulton, KF4OZY - Steve Tell, KF4ZPF - Larry Ware, - Herman Cone, N4CH - Tom Bridgers, KE4RHH - Al Parker, W8UT

Barry Ornitz, WA4VZQ -made our area home on Sat., 'til we all left about 1:30 PM to head back into the bad "Dennis WX" in eastern NC. (Larry - did

your wife's flight actually make it into Raleigh)

In the next space were Bob Duckworth, WB4MNF and Marty, AA4RM

Andy Howard, WA4KCY, was evident at many times/places, as were other notables, and some not so. Sorry I don't know everyone, and for missing the ones I do.

I hope some one else will fill in some more names.

I brought home a number of projects to keep me occupied in the next weeks/months/(years?) I know 3 full vehicles pulled out Sat afternoon, so there is lots of enjoyment for all of us ahead. I think we left one of the group there still trying to fill his want list. I had asked him if it was a want list or his inventory list. He'd need a new warehouse if he filled the list, but he had made a dent in it, and I know he has a lot at home already.

I came home to "Dennis repeat". Got home to New Bern, near the coast, at 7:15, by 8:15 we were in the eye. Had bn raining steady since I left home Thurs, winds of 40+ mph Sat. afternoon. I had a very windy/rainy trip the last 100 miles home, really thru the worst part of it. Once the eye hit, things calmed way down, tho' my wife says I slept thru 2-3 hours of the back side of the storm. I checked into the Hurricane Watch Net on 14.325 at abt 8:30 ET to give info if wanted. There was another stn just across the Neuse River, abt 5 mi. as the crow flies, who had water up to his back yard, abt 1 ft below the door level. He had been keeping them up with data from his wx instr. Mine wasn't quite as accurate, but confirming.

HOpe to see everyone again next year.

73,

Al, W8UT

New Bern, NC

Boat Anchors appreciated here

anchor@coastalnet.com

From: "Ed Tanton" <n4xy@att.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: RE: Some Thoughts on Test Equipment
Date: Sun, 5 Sep 1999 20:42:19 -0400
Message-ID: <NBBBJDEEIFDDANGEGHLBIEBJGNAA.n4xy@att.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Hi Bobbi et al... the Tek 7600 series is one of my all time coups, bargain-wise. I had bought a couple of signal generators from a guy at a GREAT price. A 10GHz Digitally Synthesized, like-new generator came in with several of the front panel push-buttons stoved in. Bottom line was that several modes were lost, although it was still functional as a straight CW 10GHz generator. He was a very honest guy, and owned up to remembering he

hadn't protected the face of the unit when packing. What did I want to do. He offered me a list of stuff he would allow me a serious discount on. Included in that list was a BRAND NEW 7623-B Storage Mainframe, appropriate like-new plug-ins, including the Curve Tracer plug-in. Bottom line, after "discount" was \$300!!! And, I got to keep the 10GHz Generator! I loved it!!! Beautiful 'scope! I'll have some photos of it on the website before too long-now that I have it up and running (the website that is.)

72 / 73 Ed N4XY Elecraft K2 sn: 000057

Webpage: <http://www.qsl.net/n4xy/>

Ed Tanton N4XY EMAIL: n4xy@arrl.net
189 Pioneer Trail
Marietta, GA 30068-3466 TEL: (770) 971-0436

INTERESTS: *CW (99.5%) *QRP (QRP-L# 758)
*BoatAnchors *Test Equipment *Photography

~~~~~  
"Begin at the beginning... and go on until you come  
to the end: then stop."

The White Rabbit, from "Alice In Wonderland"  
~~~~~

Message-Id: <3.0.6.32.19990905212810.007cc670@pop.voyager.net>
Date: Sun, 05 Sep 1999 21:28:10 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Kim Herron <kherron@voyager.net>
Subject: Re: Rack needed
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Gang,
Math lesson time
>> Our Canadian acres are more modest. 204ftX204ft= 5716sqft.

204X 204 is 41616 not 5716

>>>Lessee, an acre is about 5000 square yards (by US measure).

Actually that's real close. One square acre, US measure is 43,560 square feet. Or 4840 square yards.

>Andre, I bet Bill is from Texas. ;-)

Yeah, I suppose a texas acre is bigger:-). But I'd bet he was made to learn his weights and measures tables, like I was, when they still taught such things in school. I'd even bet he can tell the time on an analog clock :-)

Kim W8ZV

Message-Id: <3.0.6.32.19990905213556.007ca1d0@pop.voyager.net>
Date: Sun, 05 Sep 1999 21:35:56 -0500
To: Old Tube Radios <boatanchors@theporch.com>
From: Kim Herron <kherron@voyager.net>
Subject: Re: Navy Hammarlund RBG info please
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi Paul (and the rest of you),

> I bought today at the Livermore swap a Hammarlund HQ 120 that has
> been dressed up for the Navy and called a RBG receiving set. The band
> spread is not set up for the hambands but for some other frequency range.
> There is also speaker called out to accompany this reciever which I would
> like to try and locate.

> Anyone know the purpose of this reciever as used by the Navy and
> would a copy of the manual be available. Thanks for the help.

Thought some of you would like this info besides Paul. Thought I don't know the purpose of the receiver originally, I do know that it was used in some embassies, by the US as well as other countries. I had one of those that had come from the Greek embassy in Washington. Now, if your real lucky, when you pull off the bottom cover, you'll find a schematic lacquered to the cover. There are also some notes regarding maintenance, but no alignment instructions.

So, what you do is use the 120 manual for alignment. The circuit is nearly identical, with the exception of the band spread dial. There are some cap values that were changed in the front end, if memory serves, to make the bandspread track accurately. The receiver performance, compared to a 120, is the same. Paul I hope that this helps. When Robert Fowle had his extensive library of Hammarlund material, I got to look at a lot of that stuff. The Truckload of Hammarlund receivers and transmitters that I purchased from a fellow in Arkansas didn't hurt either.

73

Kim W8ZV

End of BOATANCHORS Digest 2660
